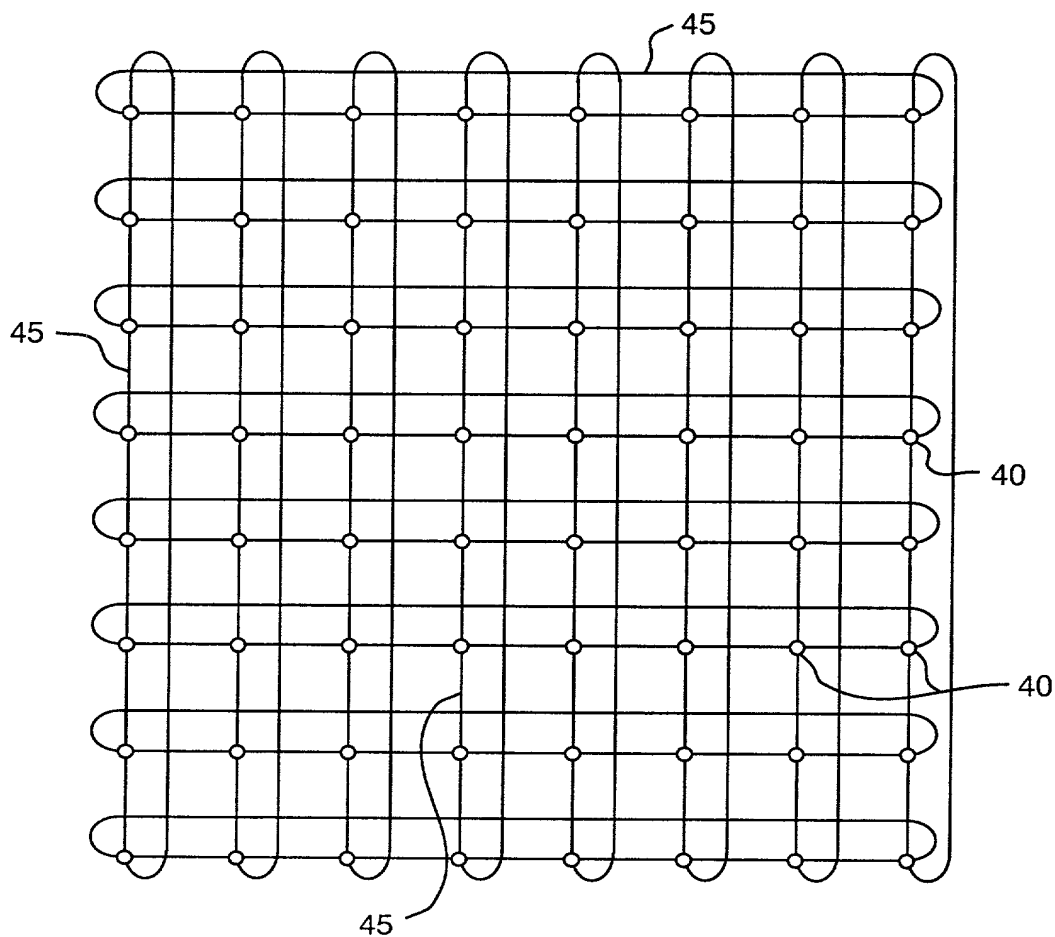


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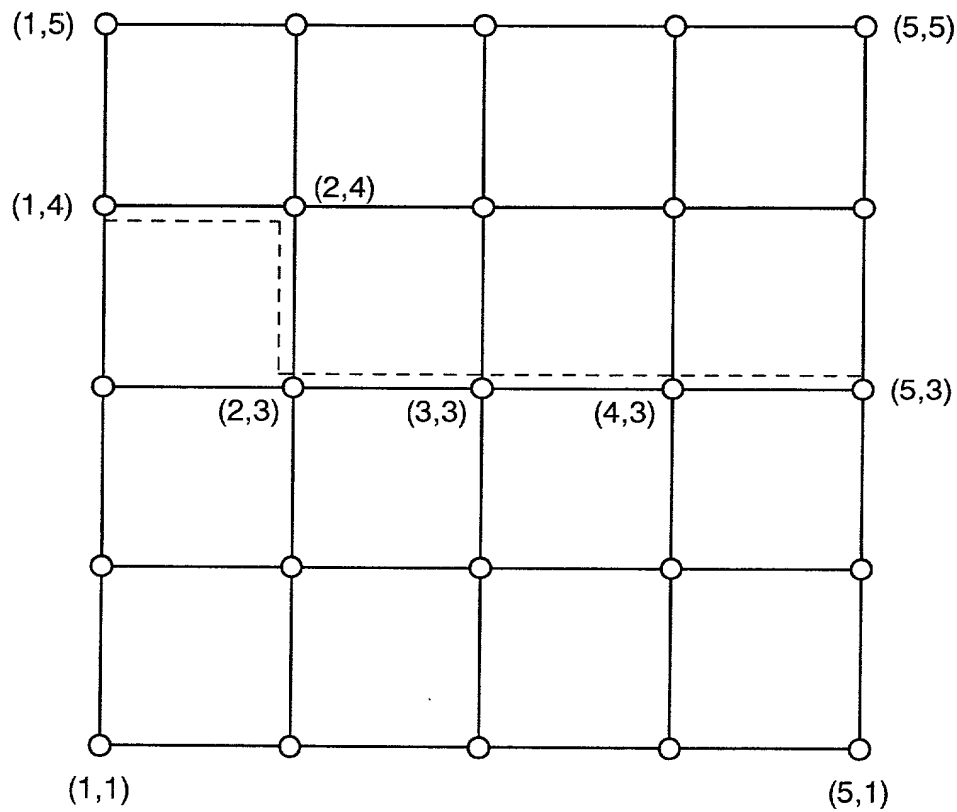


FIG. 2

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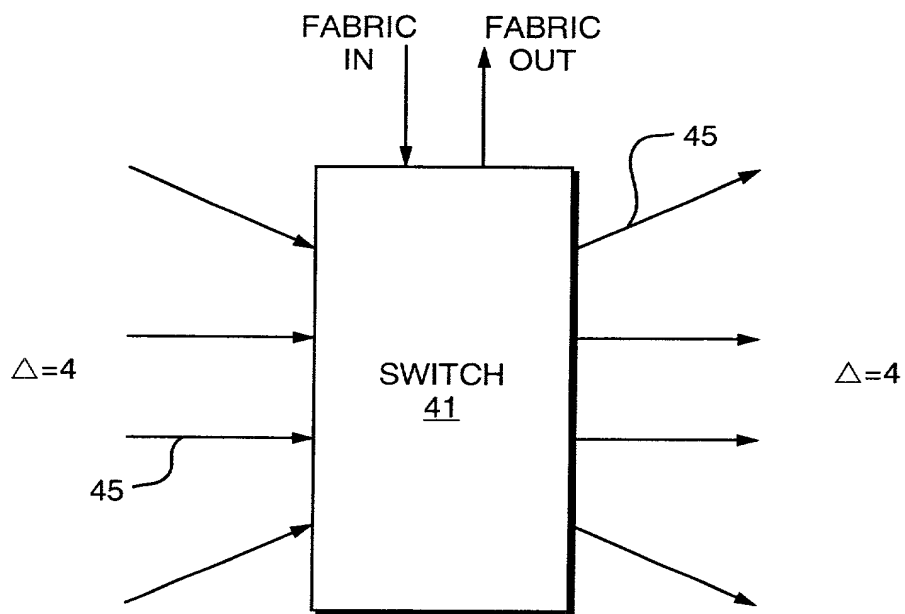


FIG. 3

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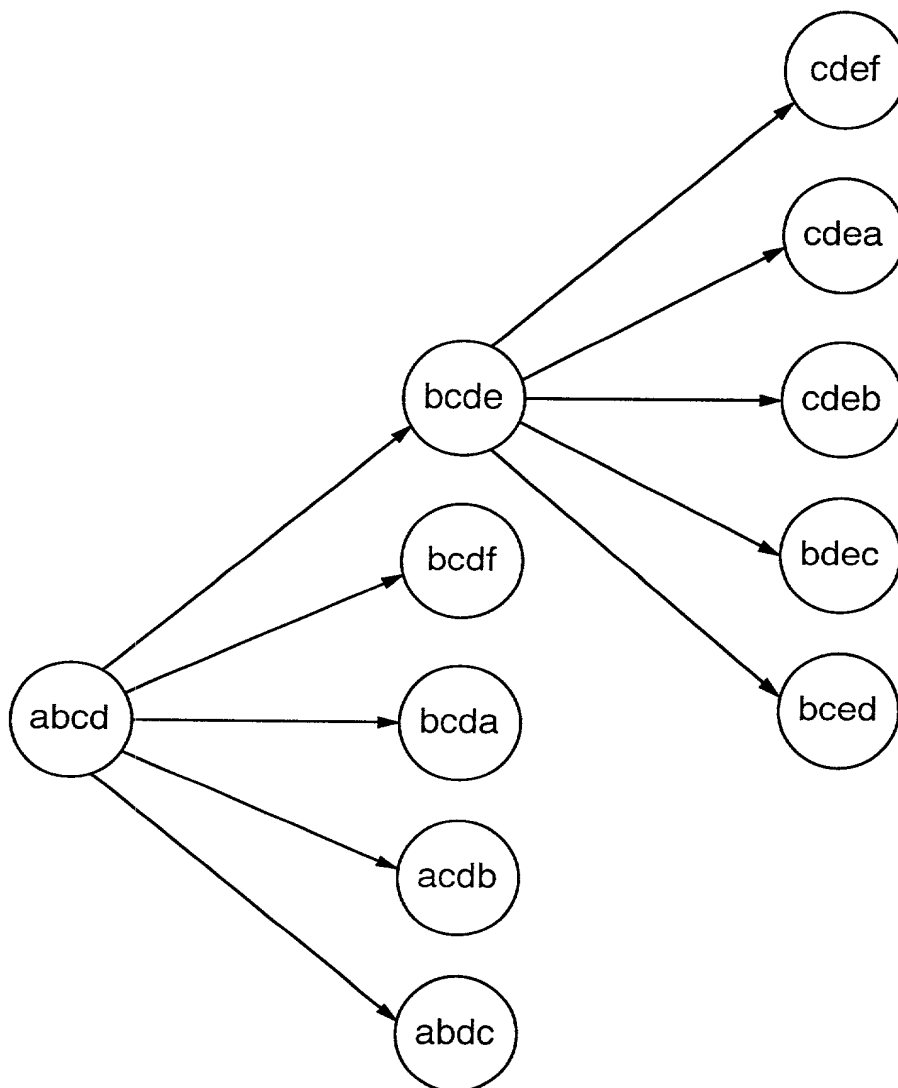


FIG. 4A

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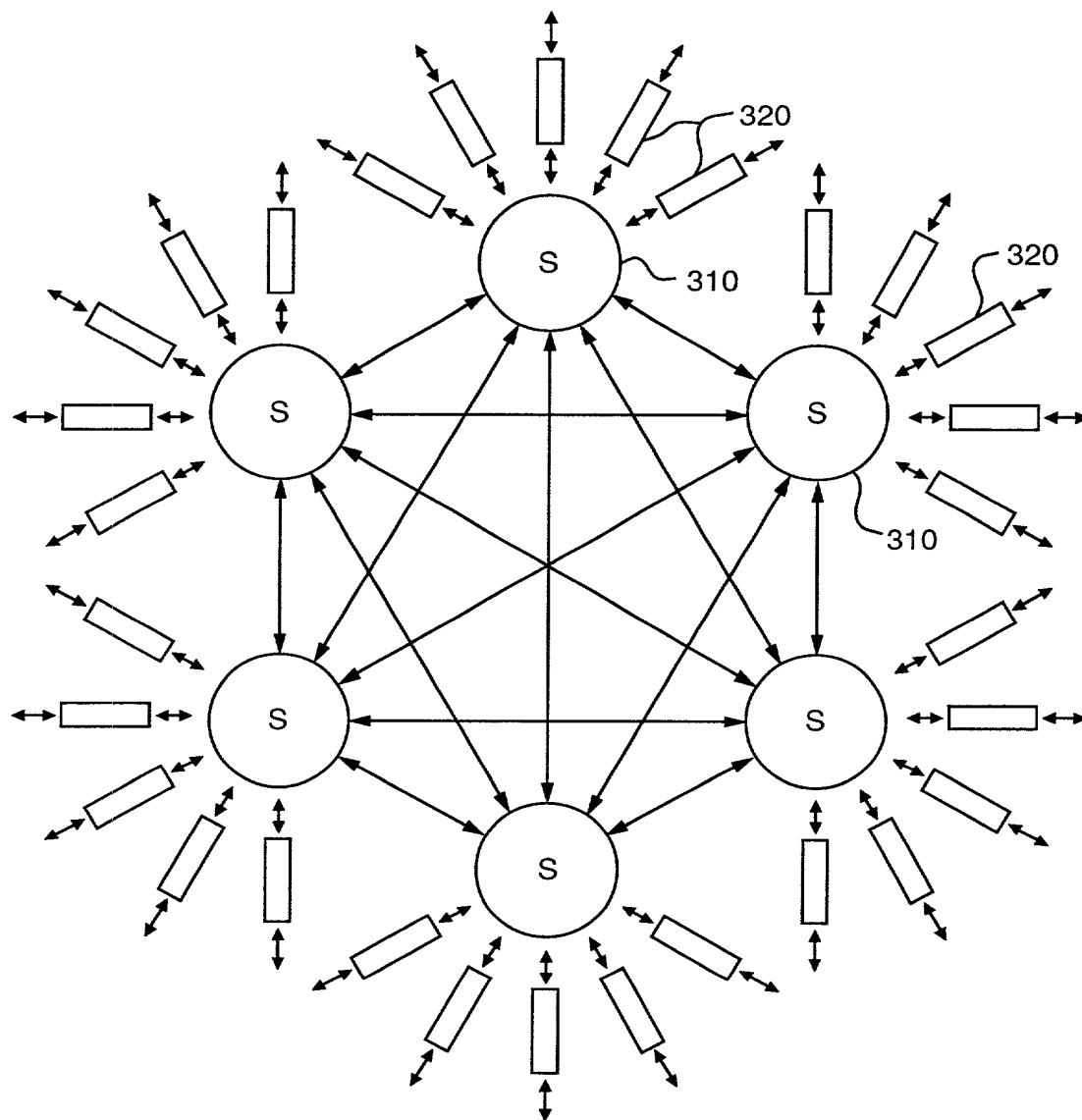


FIG. 4B

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$\Delta = 3$
 $D = 2$

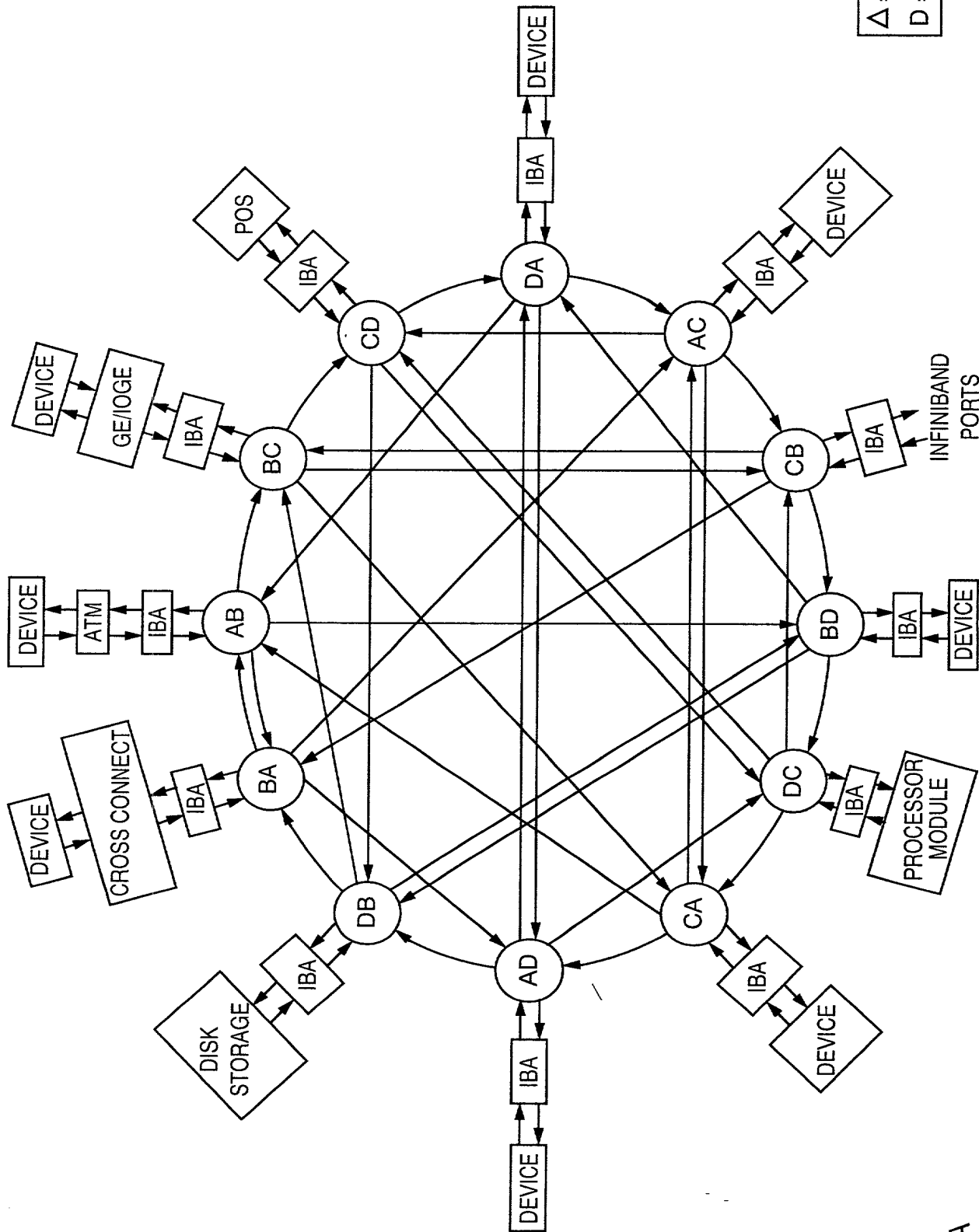


FIG. 5A

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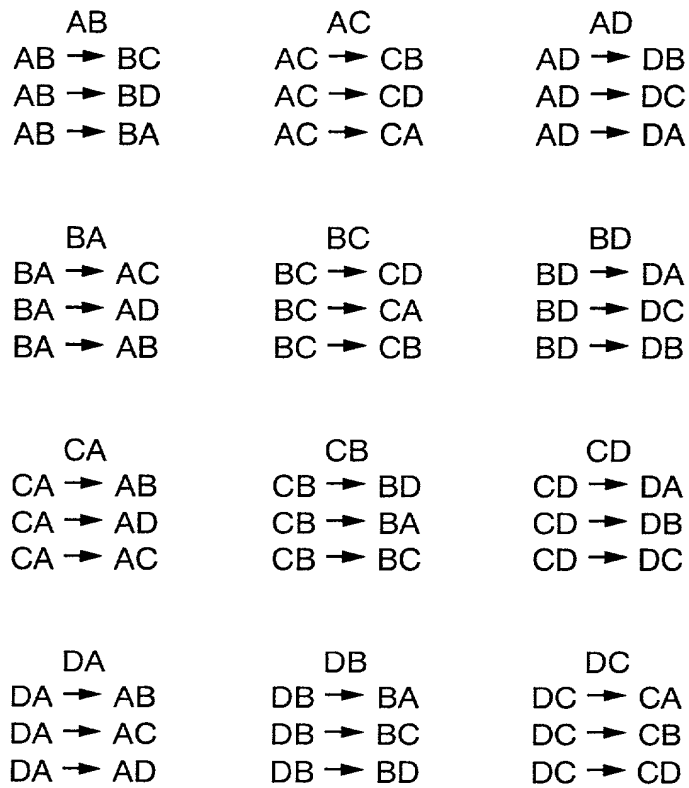


FIG. 5B

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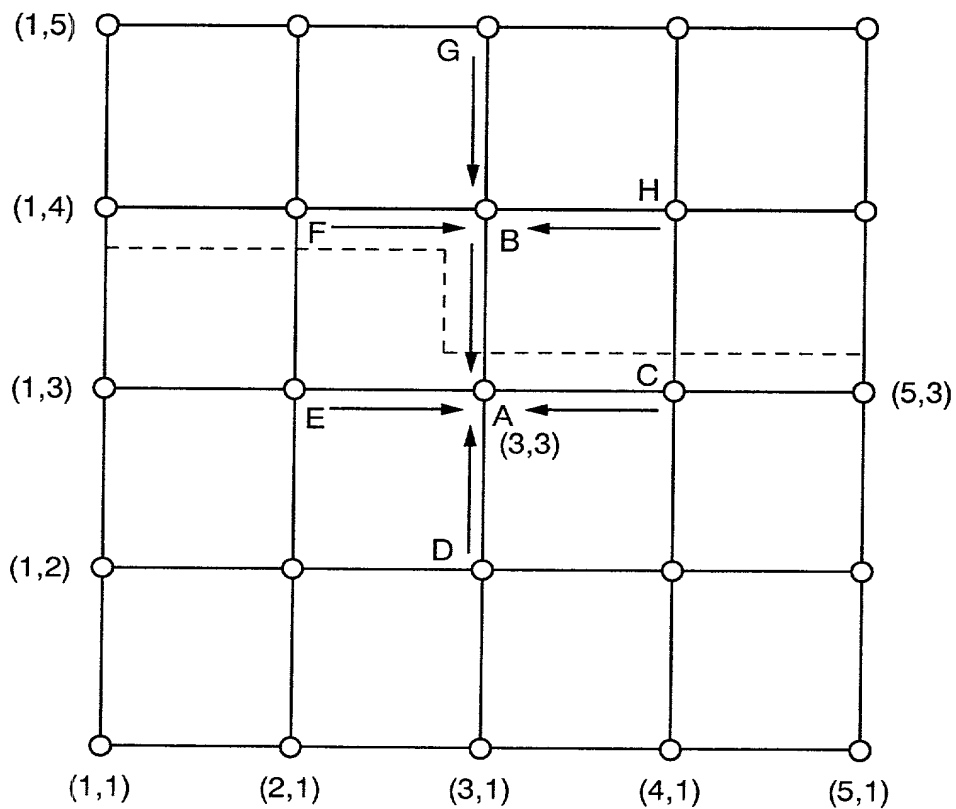


FIG. 6

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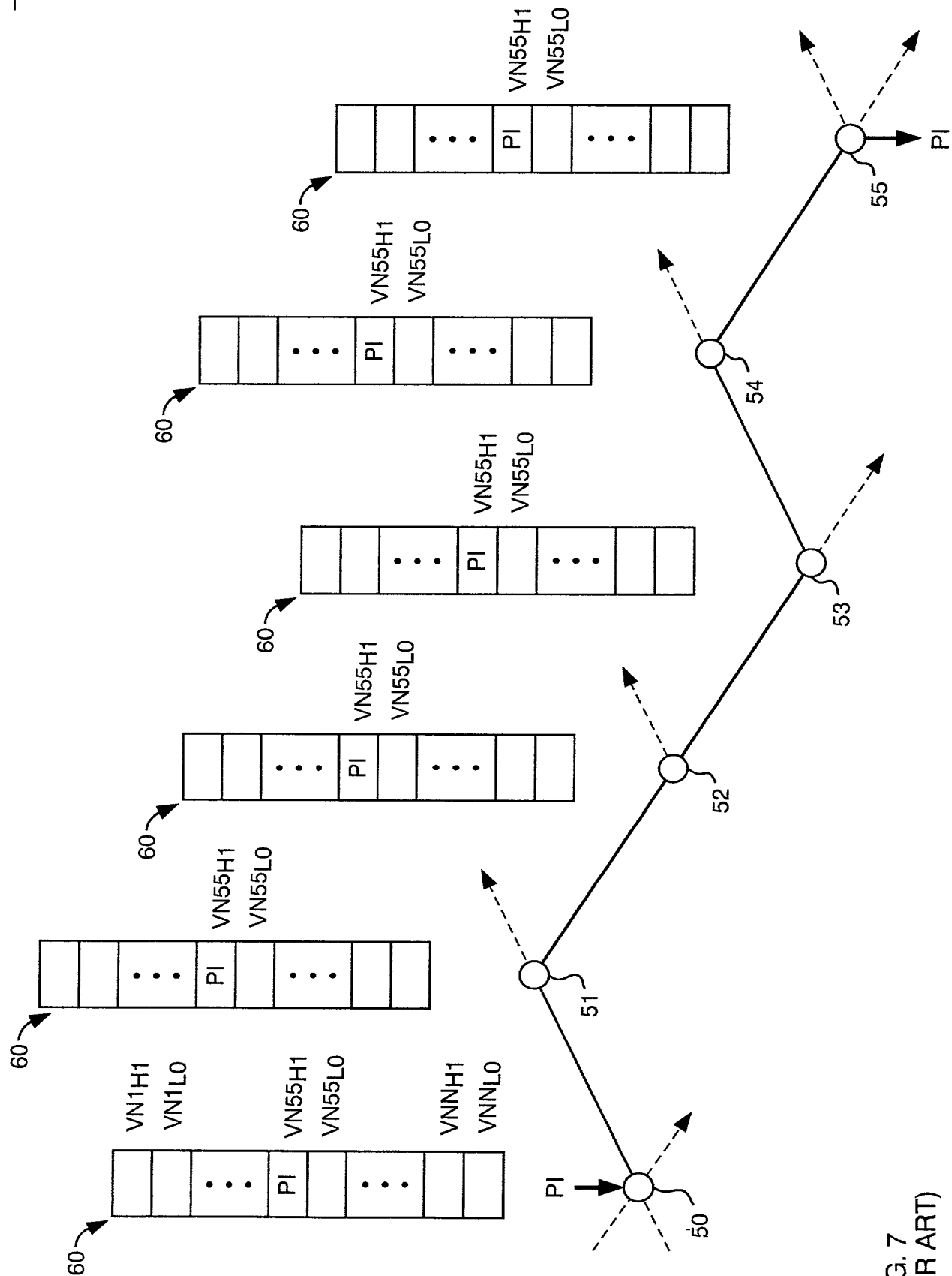


FIG. 7
(PRIOR ART)

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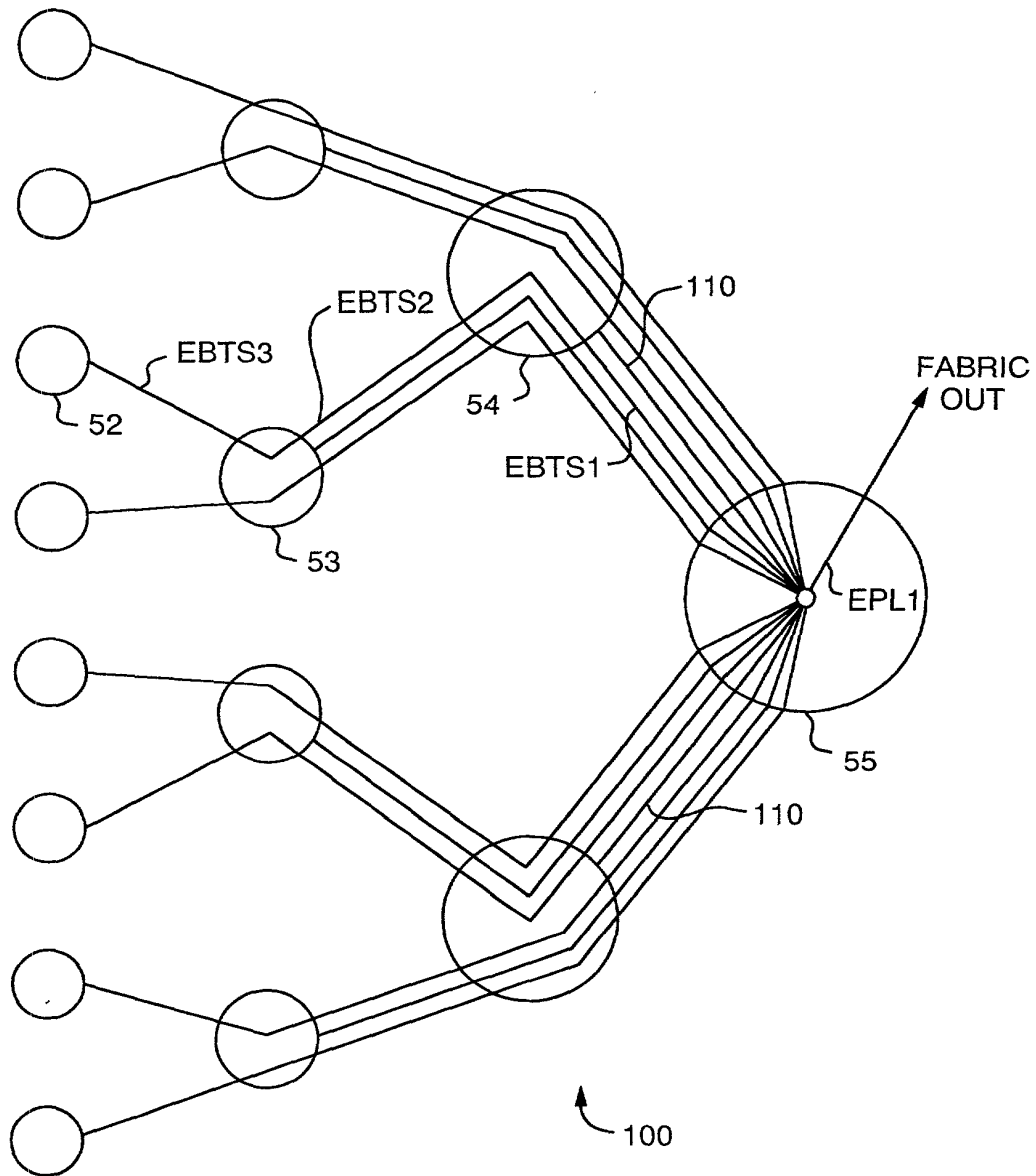


FIG. 8A

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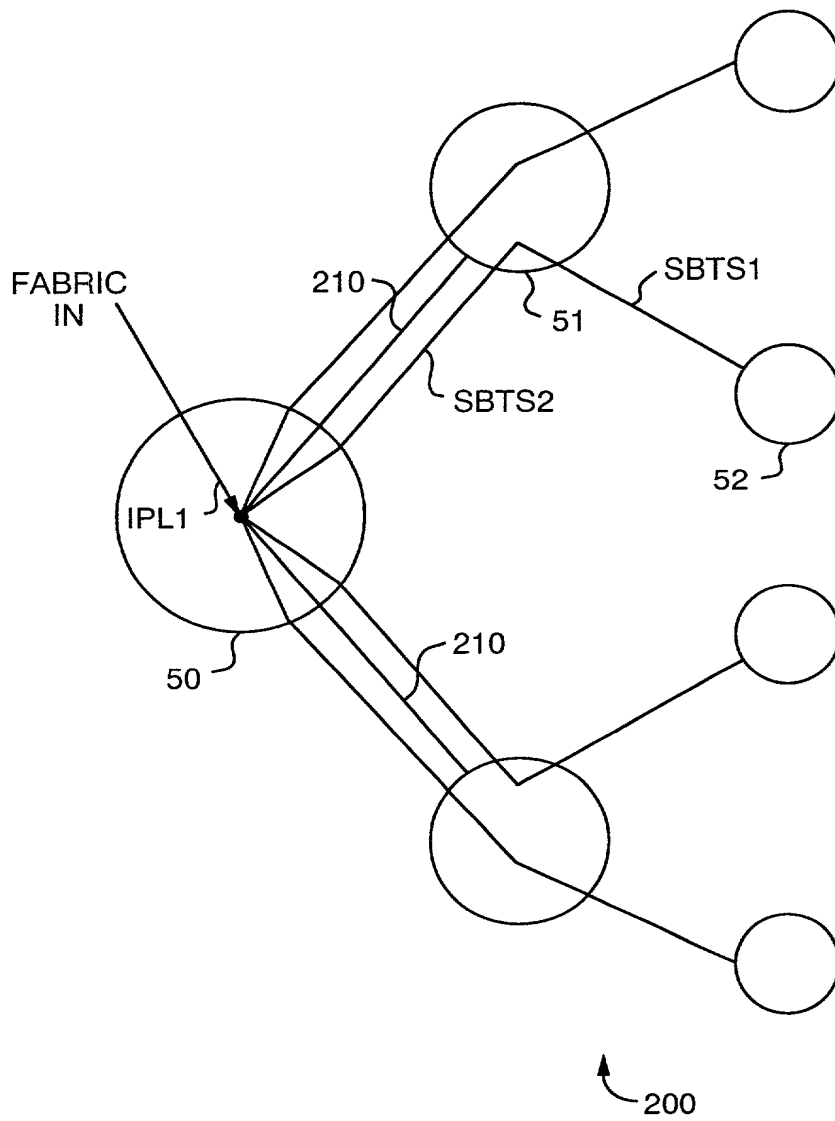


FIG. 8B

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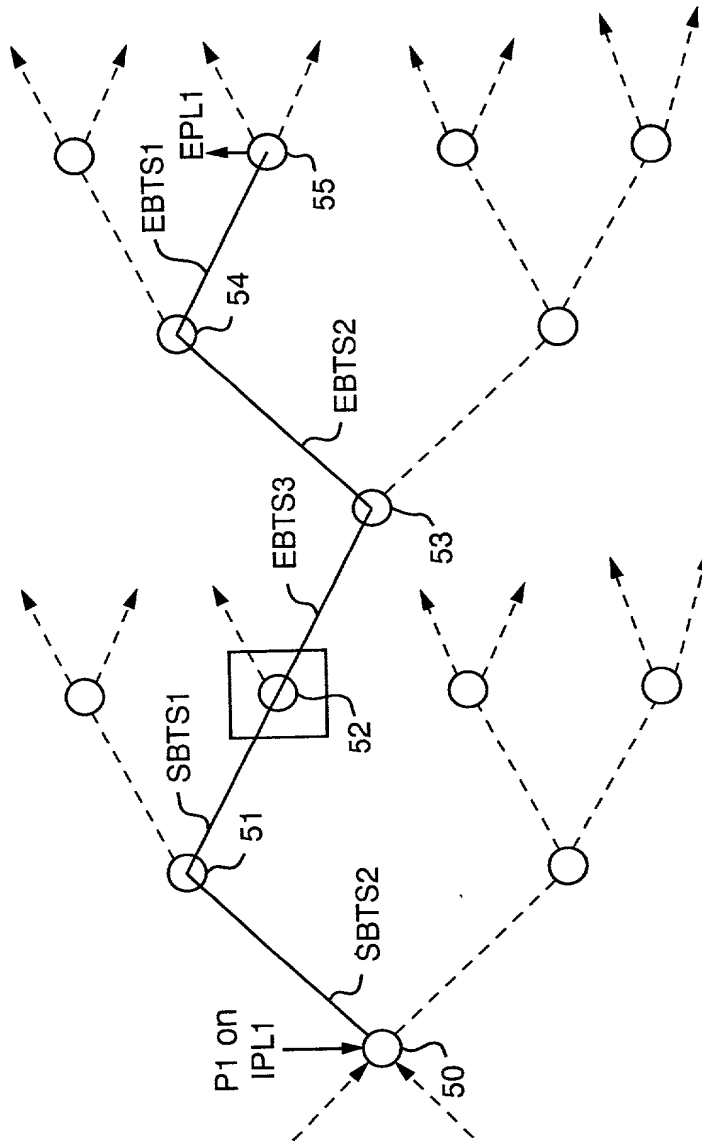


FIG. 9

FIG. 9

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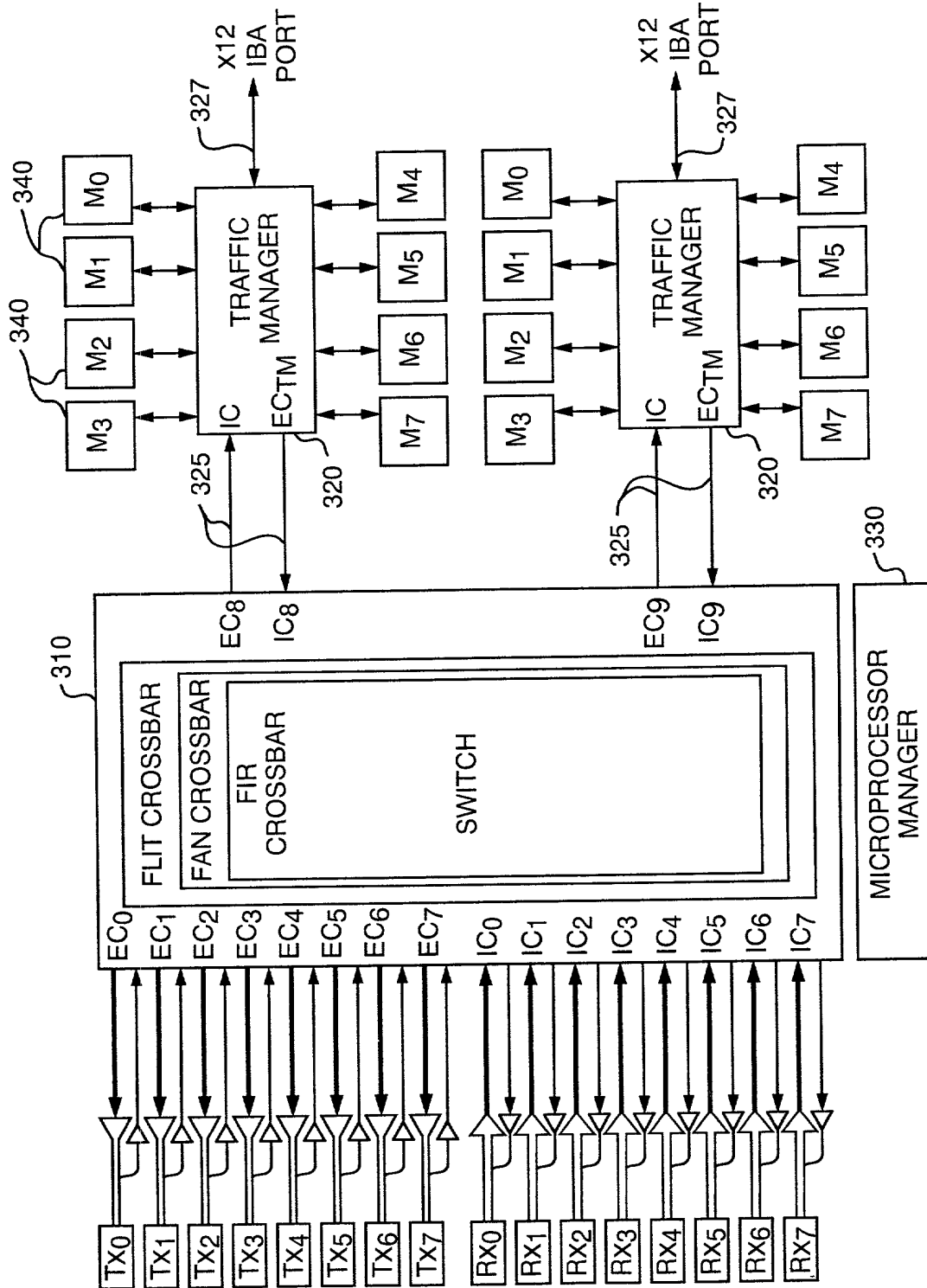


FIG. 10

FIG. 10 6004066

FIG. 11A

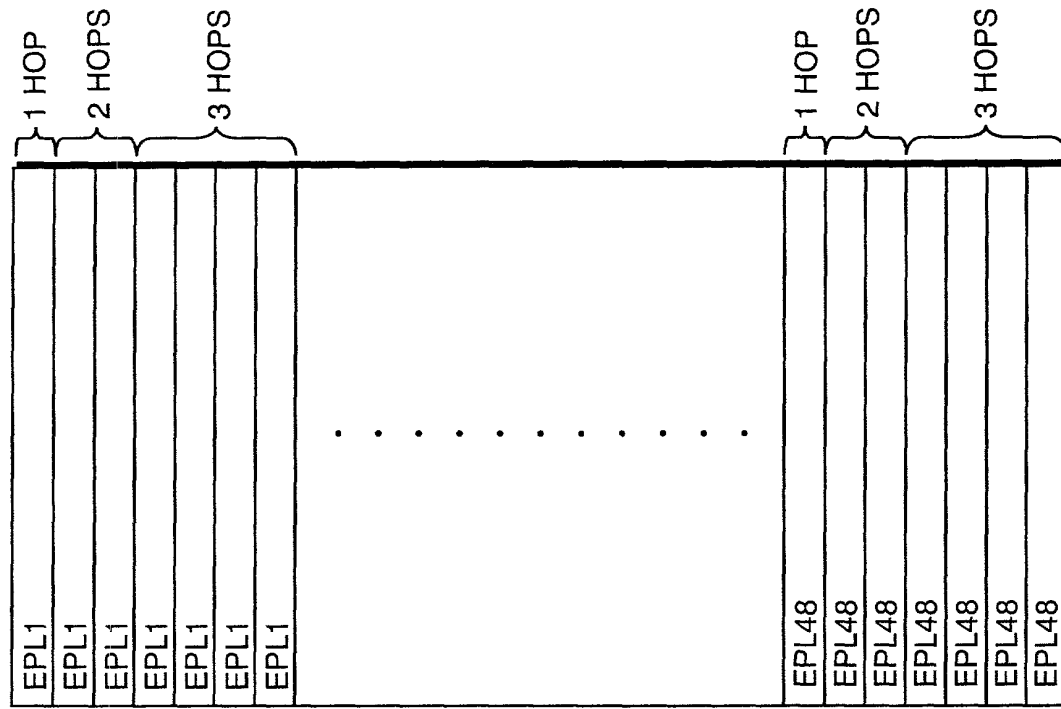


FIG. 11C

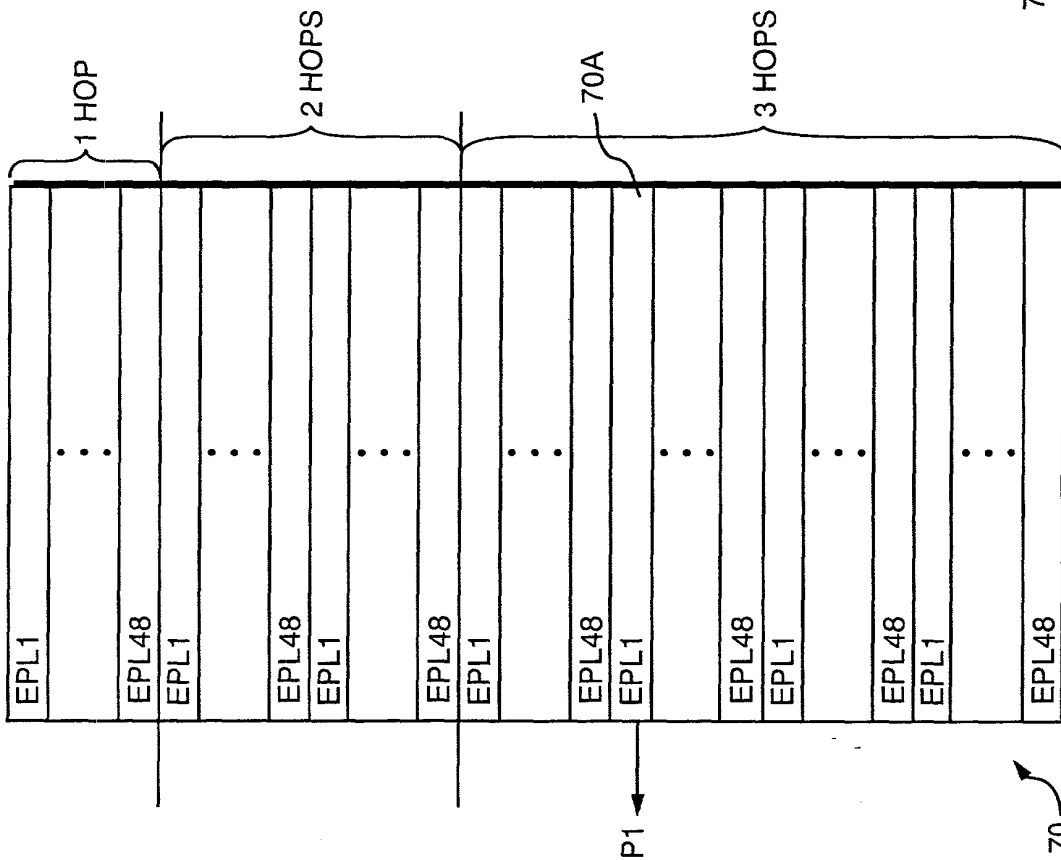


FIG. 11B

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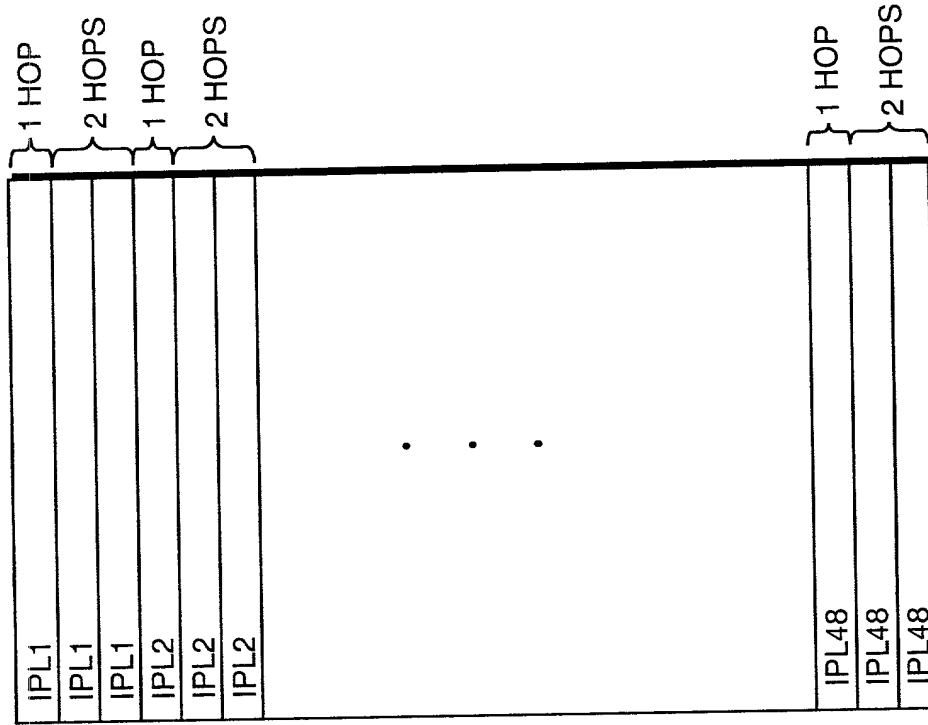


FIG. 11E

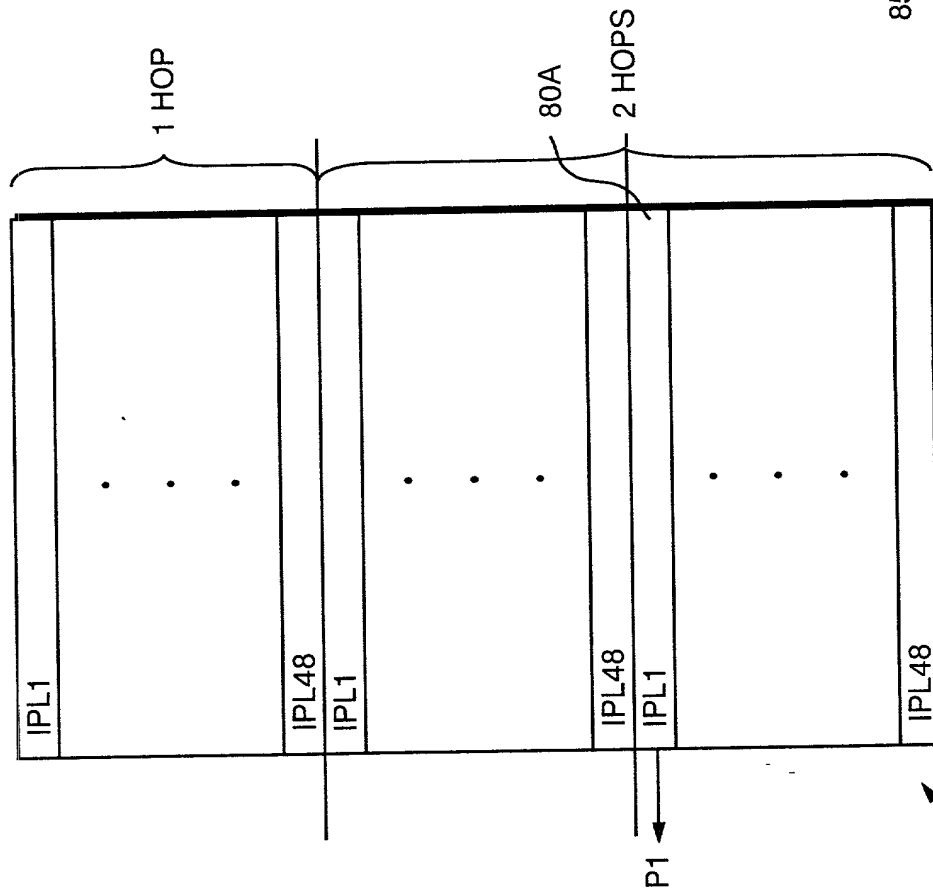


FIG. 11D

0001	0001	0001
0002	0002	0002
0003	0003	0003
0004	0004	0004
0005	0005	0005
0006	0006	0006
0007	0007	0007
0008	0008	0008
0009	0009	0009
0010	0010	0010
0011	0011	0011
0012	0012	0012
0013	0013	0013
0014	0014	0014
0015	0015	0015
0016	0016	0016
0017	0017	0017
0018	0018	0018
0019	0019	0019
0020	0020	0020
0021	0021	0021
0022	0022	0022
0023	0023	0023
0024	0024	0024
0025	0025	0025
0026	0026	0026
0027	0027	0027
0028	0028	0028
0029	0029	0029
0030	0030	0030
0031	0031	0031
0032	0032	0032
0033	0033	0033
0034	0034	0034
0035	0035	0035
0036	0036	0036
0037	0037	0037
0038	0038	0038
0039	0039	0039
0040	0040	0040
0041	0041	0041
0042	0042	0042
0043	0043	0043
0044	0044	0044
0045	0045	0045
0046	0046	0046
0047	0047	0047
0048	0048	0048
0049	0049	0049
0050	0050	0050
0051	0051	0051
0052	0052	0052
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0054	0054	0054
0055	0055	0055
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0060	0060	0060
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0065	0065	0065
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0069	0069	0069
0070	0070	0070
0071	0071	0071
0072	0072	0072
0073	0073	0073
0074	0074	0074
0075	0075	0075
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0077	0077	0077
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0080	0080	0080
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0085	0085	0085
0086	0086	0086
0087	0087	0087
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0089	0089	0089
0090	0090	0090
0091	0091	0091
0092	0092	0092
0093	0093	0093
0094	0094	0094
0095	0095	0095
0096	0096	0096
0097	0097	0097
0098	0098	0098
0099	0099	0099
0100	0100	0100
0101	0101	0101
0102	0102	0102
0103	0103	0103
0104	0104	0104
0105	0105	0105
0106	0106	0106
0107	0107	0107
0108	0108	0108
0109	0109	0109
0110	0110	0110
0111	0111	0111
0112	0112	0112
0113	0113	0113
0114	0114	0114
0115	0115	0115
0116	0116	0116
0117	0117	0117
0118	0118	0118
0119	0119	0119
0120	0120	0120
0121	0121	0121
0122	0122	0122
0123	0123	0123
0124	0124	0124
0125	0125	0125
0126	0126	0126
0127	0127	0127
0128	0128	0

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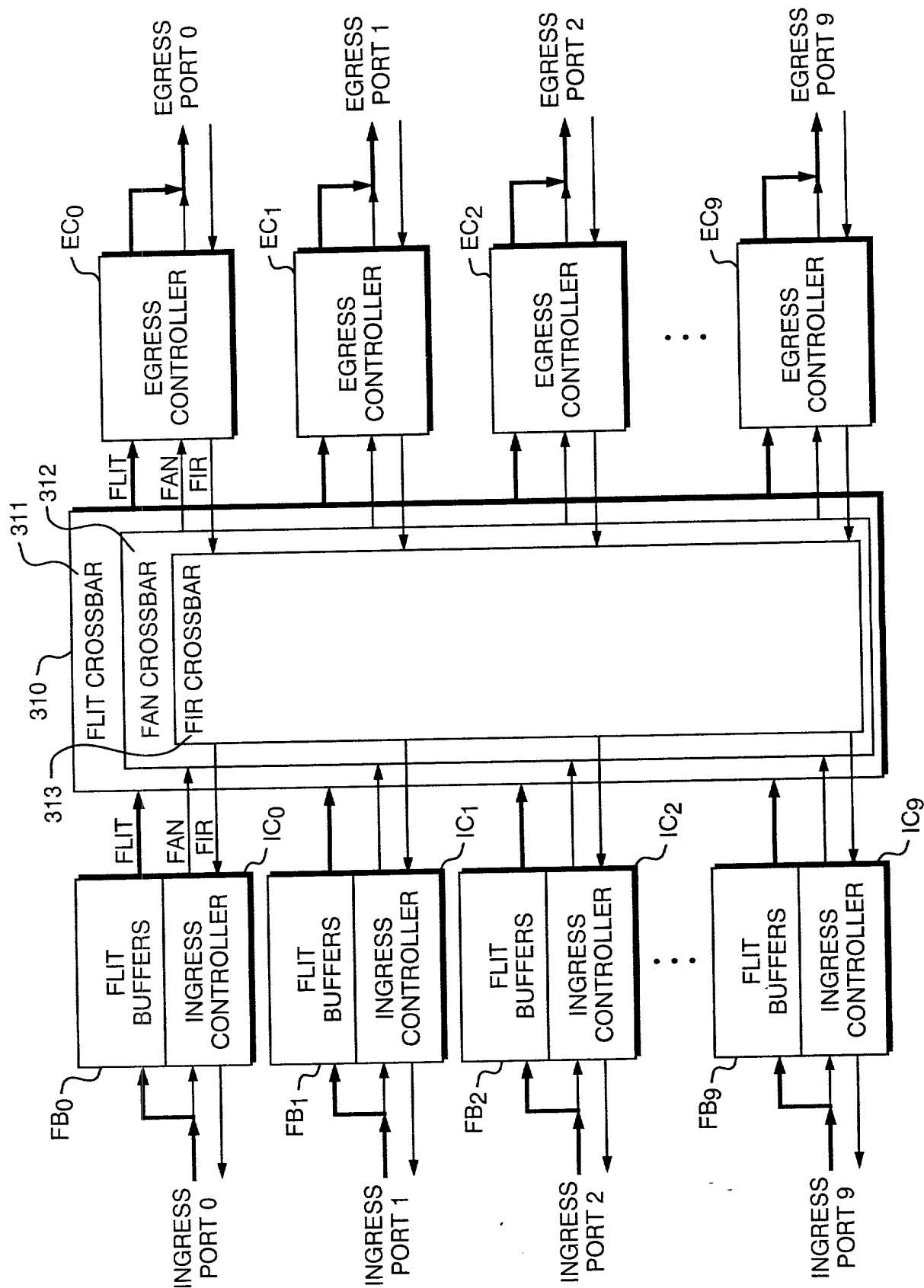


FIG. 12

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CONTROL STRUCTURE	SIZE (IN BITS)	DESCRIPTION
IngressPacketState	1280x35=44,800	EACH IngressPacketState STRUCTURE MANAGES THE STORAGE OF A PARTIALLY RECEIVED PACKET ON ONE OF THE INGRESS PORTS.
EgressLaneState	(128x30=3,480)	EACH EgressLaneState STRUCTURE SUPPLIES INFORMATION USED TO PROCESS RECEIVED CREDITS.
AvailableEgressLane	(128x1)	EACH FLAG INDICATES THAT A PARTICULAR LANE IS AVAILABLE OR IN USE.
FanState	(512x44=22,528)	EACH FanState STRUCTURE HOLDS ONE FAN WAITING TO BE CONVERTED INTO A FIR AND POINTERS WHICH ALLOW CREATING A LINKED LIST OF PACKETS WAITING ON A PARTICULAR CHANNEL AND A LINKED LIST OF FANS COMPRISING A PARTICULAR PACKET.
AvailableFanState	(512x1)	EACH FLAG INDICATES THAT A PARTICULAR LOCAL FANSTATE STRUCTURE IS AVAILABLE OR IN USE.
WaitingForLanes	(2928x1)	EACH FLAG INDICATES THAT A PARTICULAR TUNNEL SEGMENT HAS A PACKET READY TO BE ASSIGNED TO A LANE AS SOON AS ONE BECOMES AVAILABLE.
WaitingForFSM	(2928x1)	EACH FLAG INDICATES THAT A PARTICULAR CHANNEL HAS A FAN READY TO BE CONVERTED INTO A FIR AS SOON AS THE EgressController HAS BANDWIDTH AVAILABLE TO PERFORM THE CONVERSION.
WaitingForFirFifo	(2304x1)	EACH FLAG INDICATES THAT A PARTICULAR LANE HAS A FAN READY TO CONVERT INTO A FIR AS SOON AS ROOM IN THE FIR FIFO BECOMES NON-FULL.
SegmentPointer	(2938x13=38,194)	EACH SegmentPointer POINTS TO A QUEUE OF PACKETS WAITING ON A TUNNEL SEGMENT.

FIG. 13

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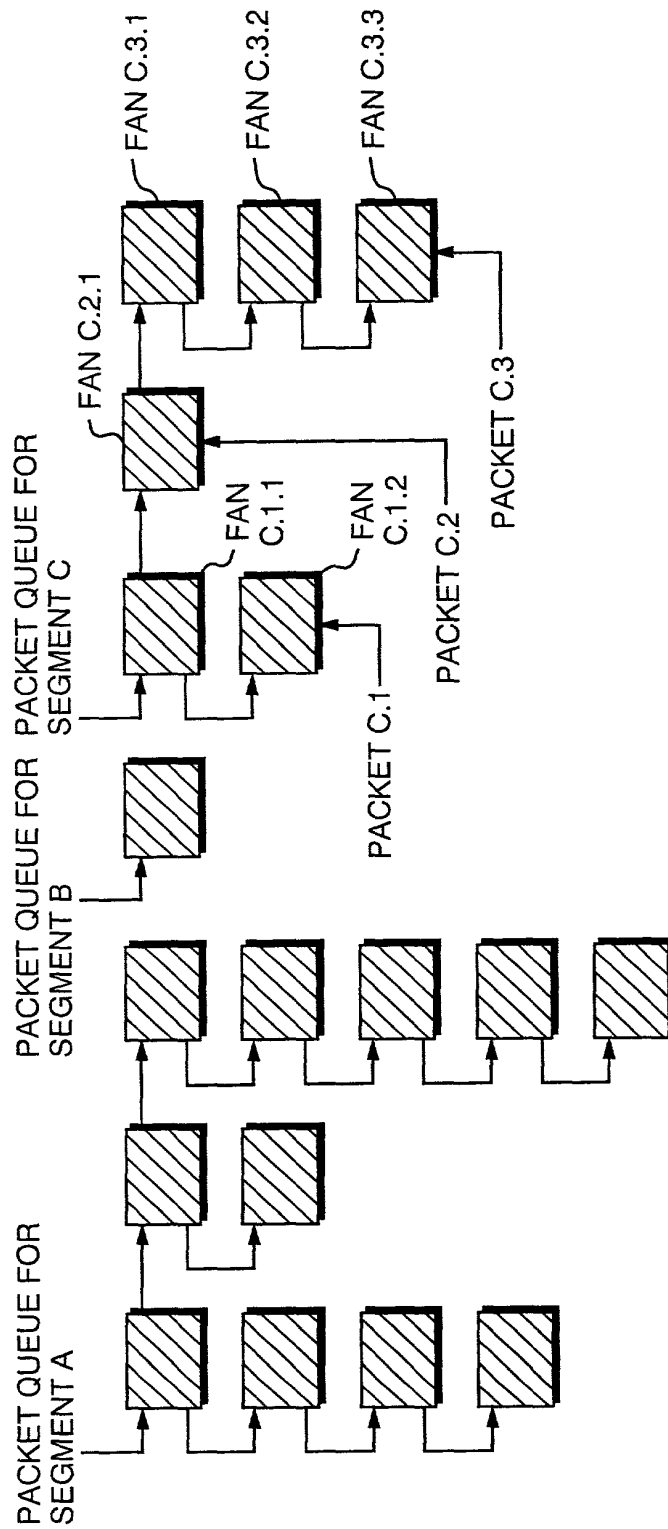


FIG. 14

FIG. 15

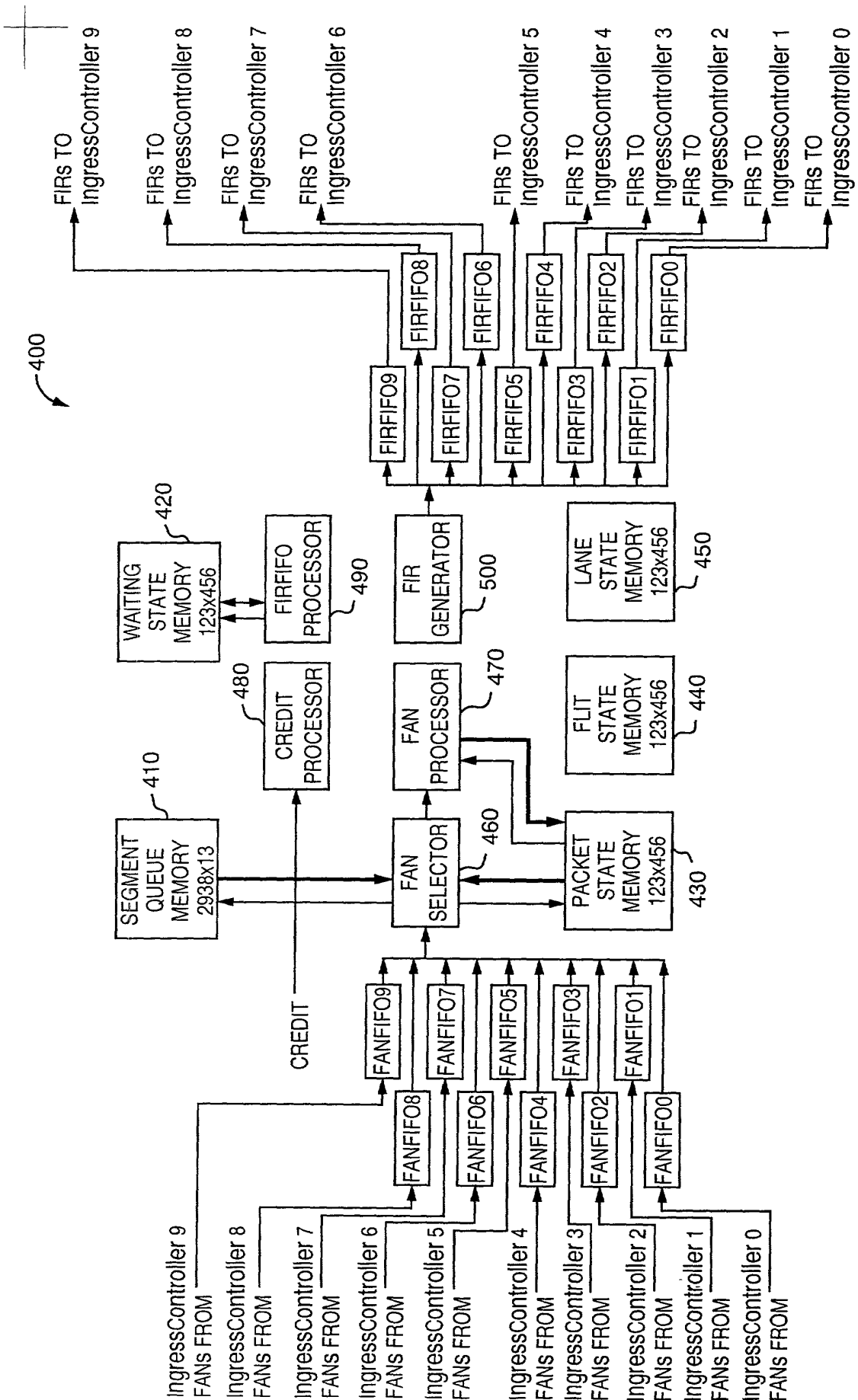


FIG. 15